

All you need to know about mega solar plan

The idea was first floated by PM Modi in 2018 during the first assembly of the International Solar Alliance (ISA)

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[Shreya Jai](#) | New Delhi Last Updated at August 15, 2020 21:11 IST



The ambitious OSOWOG will connect 140 countries through a common grid that will be used to transfer solar power.

Prime Minister [Narendra Modi](#) in his [Independence Day](#) address on Saturday mentioned about the mega plan of "One Sun, One World, One Grid" (OSOWOG) or a trans-

[national](#) electricity grid supplying solar power across the globe. The idea was first floated by Modi in 2018 during the first assembly of the [International Solar Alliance](#) (ISA).

In June this year, the ministry of new and renewable energy came out with a Request for Proposal (RFP) to hire consultants for converting this idea into policy. Several policy experts cited it as part of India's answer to China's One Belt One Road infrastructure initiative which entails investment in close to 70 countries.

The announcement is also considered part of several policy decisions by the Indian government to restrict Chinese investment, following the heightened tension between the two countries post the Galwan Valley clash in Ladakh.



PM [Narendra Modi](#) addressing the nation from ramparts of Red Fort on [Independence Day](#).

What does OSOWOG mean and what will it do?

According to the draft plan prepared by the MNRE, the ambitious OSOWOG will connect 140 countries through a common grid that will be used to transfer solar power. "The vision behind the OSOWOG mantra is "the Sun never sets" and is a constant at some geographical location, globally, at any given point of time. With India at the fulcrum, the solar spectrum can easily be divided into two broad zones viz. far East which would include

countries like Myanmar, Vietnam, Thailand, Lao, Cambodia and far West which would cover the Middle East and the Africa Region,” MNRE said in the terms of reference in the RfP published to hire consultants for OSOWOG.

The plan is divided into three phases: the first phase will connect the Indian grid with the Middle East, South Asia and South-East Asian grids to share solar and other renewable energy resources. The second phase will connect the first phase nations with the African pool of renewable sources. The third phase will be the concluding step of global interconnection, said MNRE.

How novel is the idea?

Having international associations is not a new trend for the energy sector which already has a strong geopolitical organisation such as OPEC. Officially announced during UN Climate Change Conference in Paris in 2015, the ISA is a partnership of solar-resource rich countries. Currently, there are 121 countries that have agreed to be members for ISA. Most of these are countries with large participation from Africa, South-east Asia and Europe. Pakistan and China are not a part of ISA.

Additionally, India has power trade with Bhutan and hydropower project development pact with Nepal. Last year, the Central Electricity Regulatory Authority gave its nod to new regulations of ‘Cross-border electricity trade’, thereby making the trade of electricity to neighbouring countries more seamless. This included setting up of nodal agency for bilateral trade of electricity, monitoring and planning by central agencies, and similar technology interface at both ends.



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However, to have an inter-continent power infrastructure is a fairly new idea. Australia based Sun Cable is developing the Australia-ASEAN Power Link (AAPL), under which it will supply renewable electricity from Australia to Singapore and later to Indonesia. According to the website of Sun Cable, "the project will integrate three technology groups - the world's largest battery, the world's largest solar farm, and a 4,500km high voltage direct current (HVDC) transmission system from the solar / storage facility to Darwin (Australia), Singapore and eventually Indonesia."

Why is OSOWOG needed and how practical it is?

Several countries including China have initiated infrastructure projects in other countries, which is seen as a sign of asserting supremacy by several policy experts. While India is a partner nation with most trade associations, with ISA and OSOWOG, it is planning to take a leadership position.

"It is obviously a very grand and ambitious project. But it is also clear that a new energy sector paradigm is needed as we are facing a huge inflexion point in electricity generation and consumption. Potential benefits include widespread scale up in energy access,

abatement in carbon emissions, lower cost and improved livelihoods. India will need a strong coalition of international partners to realise this vision. It will be interesting to see a practical outline and how the government intends to go about actual execution," said Vinay Rustagi, managing director, Bridge to India, a research agency tracking renewable sector in India.

PM Modi in his [Independence Day](#) speech even mentioned an increased partnership with the ASEAN nations. "For India, neighbours are not only ones we share a border, but also those with whom we share emotions and values. Today, India has close relations in the greater neighbourhood. We are working together and have a lot of mutual respect for each other. ASEAN nations not just have a great partnership with us today, but have shared values and cultures for centuries," Modi said.

Geo-politically, this is being touted as a clever strategy however technology-wise, this is yet to make sense. With battery and storage technology becoming cheaper, electricity consumption at source end is a more feasible idea for solar power. However, a shortage of land banks and limited hours of sunshine tip the balance towards expanding the sourcing of solar energy to other nations.

Several African nations are devoid of reliable electricity supply and that makes them a ready market for electricity infrastructure and in recent times, for renewable energy development. Off-grid solar systems have found large acceptability in Kenya where it was also a means to address poverty and illiteracy.

Chinese companies are already active in several African markets. While India has taken baby steps with ISA, a major investment drive is still missing. This is planned to be achieved through OSOWOG.

In July, the MNRE put on hold the RFP to hire a consultant for OSOWOG until further notice. Officials said Covid was one of the reasons for delaying the process. Given the scale and size of this ambitious project, the sooner it commences, the better.

https://www.business-standard.com/article/economy-policy/all-you-need-to-know-about-one-world-one-sun-one-grid-plan-120082101244_1.html